Permit #: 20006

County: GENTRY

CONFIDENTIAL UNTIL:

Date Issued: 12-01-74

Date Cancelled:

Date Plugged: 01-12-75

OGC FORMS	Date Received
1	
2	
3	12-01-74
3i	
4	12-23-74
4i	
5	05-24-76
6	05-24-76
7	05-24-76
8	
11	
12	
Misc. Form 2	

	TYPE	ID #	Date Received
Logs			
Samples	chip		
	core		
Analyses	water		
	core		

Additional Submitted Data:

COMMENTS:

formation logs only
Stripped 02-21-84

Form OGC - 3

MISSOURI OIL AND GAS COUNCIL

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL X DEEPEN ☐ PLUG BACK ☐

NAME OF COMPANY OR OPERATOR The Anschutz Corporation DATE 12-19-74

1110 Denver Club Bldg (Address) Denver (City) Colo 80203 (State)

DESCRIPTION OF WELL AND LEASE

Name of lease	Well number	Elevation (ground)
J. A. Breckinridge	#1	970 est

WELL LOCATION (give footage from section lines)
1930 ft. from (N) (S) sec. line 810 ft. from (E) (W) sec. line

WELL LOCATION
Section 12 Township 61N Range 33W County Gentry

Nearest distance from proposed location to property or lease line: 510 feet

Distance from proposed location to nearest drilling, completed or applied — for well on the same lease: _____ feet

Proposed depth: 2700'

Rotary or Cable tools

Approx. date work will start: 12-27-74

Number of acres in lease: 120

Number of wells on lease, including this well, completed in or drilling to this reservoir: 1

Number of abandoned wells on lease: 0

If lease, purchased with one or more wells drilled, from whom purchased: Name _____ Address _____

No. of Wells: producing _____ inactive _____ abandoned _____

Status of Bond

Single Well ☐ Amt. _____ Blanket Bond X Amt. 30,000

X ON FILE ☐ ATTACHED

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) use back of form if needed.

Proposed casing program:

amt.	size	wt./ft.	cem.
200	8 5/8	24 lb	to surf
to TD	5½"	15.5 lb	150 Sx

Approved casing — To be filled in by State Geologist

amt.	size	wt./ft.	cem.

I, the undersigned, state that I am the geologist of the Anschutz Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature Henry Ohlen

Permit Number: 20006

Approval Date: 1 DEC 1974

Approved By: Wallace B. Hoss

Note: This Permit not transferable to any other person or to any other location.

Remit two copies to: Missouri Oil and Gas Council P.O. Box 250 Rolla, Mo. 65401

One will be returned.

X SAMPLES REQUIRED

☐ SAMPLES NOT REQUIRED

WATER SAMPLES REQUIRED @:

any DST's

MISSOURI OIL AND GAS COUNCIL

Form OGC - 4

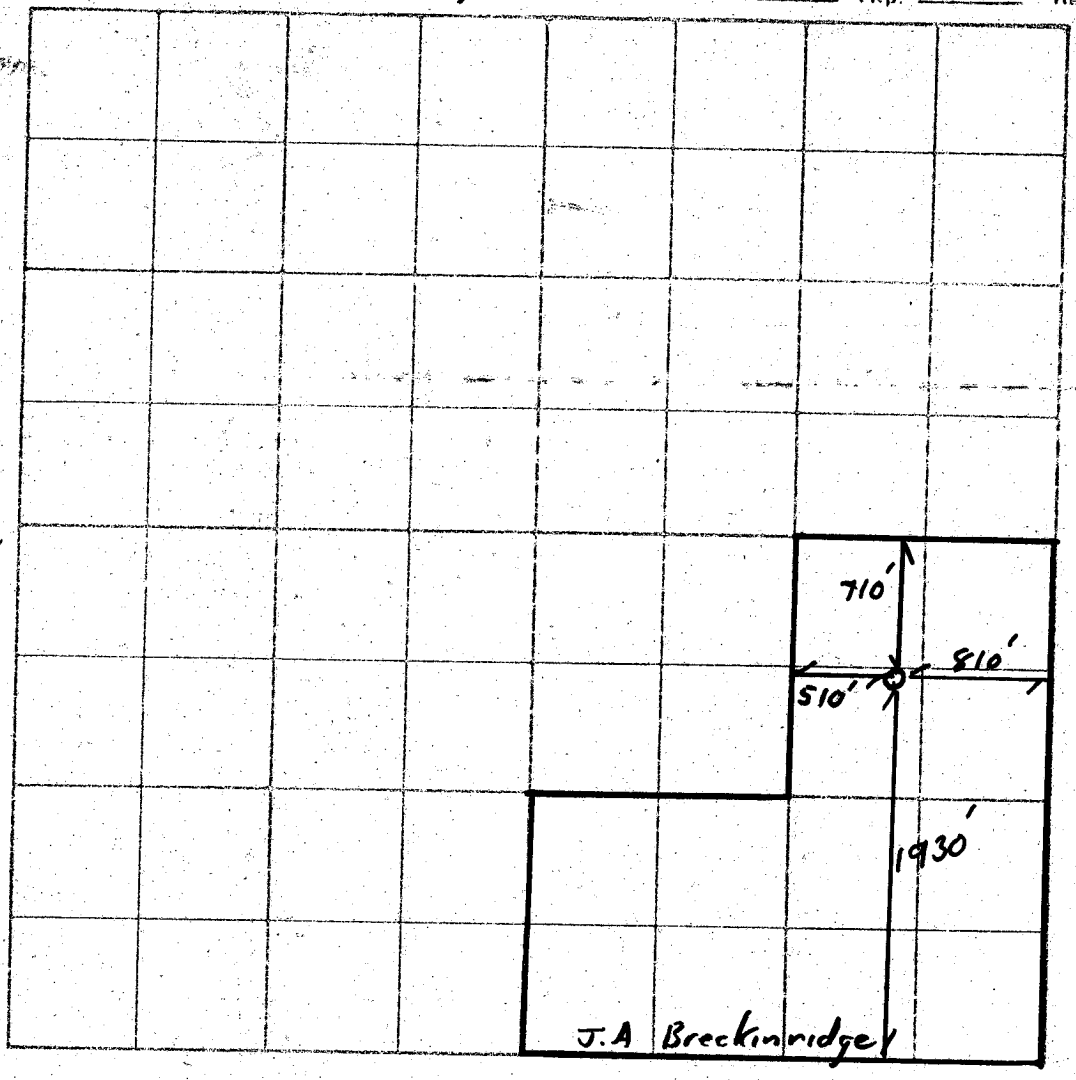
WELL LOCATION PLAT

Owner: The Anschutz Corporation

Lease Name: J.A. Breckinridge County, Gentry

1930 feet from (N) ~~(S)~~ line and 810 feet from (E) ~~(W)~~ line of Sec. 12 Twp. 61N Range 33W

SCALE
1" = 1000'



REMARKS:

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest lease and section lines, and from the nearest well on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well. Do not confuse survey lines with lease lines. See rule 7 - 3 (b) for survey requirements.

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250 Rolla, Mo. 65401
One will be returned.

(SEAL)

Registered Land Surveyor

MISSOURI OIL AND GAS COUNCIL

Form OGC-5

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

New Well [X] | Work-Over [ ] | Deepen [ ] | Plug Back [ ] | Same Reservoir [ ] | Different Reservoir [ ] | Oil [ ] | Gas [ ] | Dry [X]

Owner: The Anschutz Corporation	Address: 1110 Denver Club Building
Lease Name: J. A. Breckenridge	Well Number: 1 — Denver, Colorado 80202
Location: 1930' FSL & 810' FEL	Sec. — TWP-Range or Block & Survey: Sec. 12, T61N, R33w
County: Gentry	Permit number (OGC3 number): 20006
Date spudded: 1-3-75	Date total depth reached: 1-11-75
Date completed, ready to produce: P & A 1-12-75	Elevation (DF, RKB, RT or Gr.): 983 feet RKB
Elevation of casing hd. flange: 976 feet	Total depth: 2519'
P. B. T. D.	
Producing interval (s) for this completion: none	Rotary tools used (interval) From 0 to 2519' — Drilling Fluid used water & gel
Cable tools used (interval) From none to	Was this well directionally drilled: no
Was directional survey made: no	Was copy of directional survey filed: -
Date filed: -	Type of electrical or other logs run (list logs filed with the State Geologist): CNL-FDC-GR, DILL
Date filed: 1-75	

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt pulled
Surface	12-1/4"	8-5/8"	24#	212	110	none

TUBING RECORD

Size	Depth set	Packer set at
in.	ft.	ft.

LINER RECORD

Size	Top	Bottom	Sacks cement	Screen (ft.)
in.	ft.	ft.		

PERFORATION RECORD

Number per ft.	Size & type	Depth Interval

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Am't. & kind of material used	Depth Interval

INITIAL PRODUCTION

Date of first production:

Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
			bbls.	MCF	bbls.	API (Corr.)

Tubing pressure	Casing pressure	Cal'ted rate of Production per 24 hrs.	Oil	Gas	Water	Gas—oil ratio
			bbls.	MCF	bbls	

Disposition of gas (state whether vented, used for fuel or sold):

Method of disposal of mud pit contents: Backfilled pits & leveled

CERTIFICATE: I, the undersigned, state that I am the Oper. Engr. of the Anschutz Corp. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature: Wayne C. Pierce

RECEIVED
MAR 24 1976
MO. OIL & GAS COUNCIL

Remit two copies: one will be returned

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Mississippian	1340'		
Kinderhook	1652		No DST's or Cores
Lime Creek	1688		
Hunton	1748		
Viola	2171		
Simpson	2392		
St. Peter	2462		
Arbuckle	2478		
Total Depth	2519		

*Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well if available.

This Well Completion or Recompletion report and well log shall be filed with the Missouri State Geologist not later than 30 days after project completion.

MISSOURI OIL AND GAS COUNCIL

Form OGC-6

NOTICE OF INTENTION TO ABANDON WELL

Name of Lease J. A. Breckenridge Date _____

Well No. 1 is located 1930 feet from (N) (S) line and 810

feet from (E) (W) line of Section 12 Township 61N Range 33W

Gentry County The elevation of the ground at well site is 976

_____ feet above sea level.

Name and address of Contractor or Company which will do work is:

Halliburton Services

P. O. Drawer 1431, Duncan, Oklahoma 73533

DETAILS OF WORK

(Indicate size, kind, and depth of plugs, where casing will be pulled, other pertinent details)

No Casing pulled

Cement plugs set as follows:

35 sx @ 2510 - 2394'
35 sx @ 1394 - 1278'
30 sx @ 247 - 147'

Surface casing capped and marker installed.

CERTIFICATE: I, the undersigned, state that I am the Oper. Engr. of the Anschutz Corp. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Wayne C. Pierce
Signature

RECEIVED
MAR 24 1976
MO. OIL & GAS COUNCIL

Remit two copies; one will be returned

Form OGC-7

MISSOURI OIL AND GAS COUNCIL
PLUGGING RECORD

Owner	Address
The Anschutz Corporation	1110 Denver Club Building

Name of Lease	Well No.	
J. A. Breckenridge	1	Denver, Colorado 80202

Location of Well	Sec-Twp-Rge or Block & Survey	County
1930' FSL & 810' FEL	Sec. 12, T61N, R33W	Gentry

Application to drill this well was filed in name of	Has this well ever produced oil or gas	Character of well at completion (initial production) Oil (bbls/day)	Gas (MCF/day)	Dry?
The Anschutz Corp.	no	none	none	yes

Date Abandoned	Total depth	Amount well producing prior to abandonment. Oil (bbls/day)	Gas (MCF/day)	Water (bbls/day)
1-12-75	2519'	-	-	-

Name of each formation containing oil or gas. Indicate which formation open to wellbore at time of abandonment	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement
none			
	Cement plugs set as follows:		
	35 sx @ 147' - 247'		
	35 sx @ 1278 - 1394'		
	30 sx @ 2394 - 2510'		

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped, etc)	Packers and shoes
8-5/8	212	-	212		

Was well filled with mud-laden fluid?	Indicate deepest formation containing fresh water
yes	N/A

NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE

Name	Address	Direction from this well:

Method of disposal of mud pit contents: Pits were backfilled & leveled

Use reverse side for additional detail

File this form in duplicate with

CERTIFICATE: I, the undersigned, state that I am the Oper. Engr. of the Anschutz Corp. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Wayne C. Pierce
Signature

RECEIVED
MAR 24 1976
MO. OIL & GAS COUNCIL

Remit two copies; one will be returned

MUD AND CUTTINGS ANALYSIS

THE ANSCHUTZ CORPORATION-NCRA-DOW CHEMICAL CO.

NO. 1 J. A. BRECKENRIDGE

WILDCAT

GENTRY COUNTY, MISSOURI

CORE LAB
PETROLEUM RESERVOIR ENGINEERING

SUMMARY OF WELL DATA

I. WELL DATA

Well Name: No. 1 J. A. Breckenridge

Operator: Anschutz Corporation, NCRA, Dow Chemical

Location: NE SE 12-61N-33W Gentry County, Missouri

Lease: J. A. Breckenridge

Elevation: 975.6' GL 984' KB

Geology: Well Site Geology by Charles L. Ard

Casing: 212' 8 5/8" Surface Pipe

Total Depth: Geolograph 2520'
Schlumborger - 2522'

Status: Dry and Abandoned

II. TESTS

No Tests

III. CORES

No Cores

IV. BIT RECORD

Bit No.	Type	Depth Out	Hours
1	12 1/4" Smith L4	213'	16½
2	7 7/8" Smith V2HJ	1283'	32½
3	7 7/8" Hughs J-33	2064'	47½
Rerun 4	7 7/8" Smith F-4	2520'	32¼

V. PLUGGING DATA

Plug No.	Interval	Sacks Cement
1	2380' - 2500'	35 Sacks class A cement
2	1280' - 1400'	35 Sacks class A cement
3	160' - 255'	30 Sacks class A cement
4	Surface	10 Sacks with ½" steel plate

VI. GEOLOGIC SUMMARY

The subject well was drilled in order to test for hydrocarbon accumulations in the Viola and Hunton dolomites, with secondary objectives being sand developments in the Lower Cherokee, and zones of porosity in the Mississippian carbonates.

The Cherokee was entered at 687'. It consisted primarily of interbedded shales, silts, sands, and occasional limestone stringers. Notable sands were encountered from 845' - 885' and 1060' - 1085', but appeared to be wet with no shows or evidence of hydrocarbon accumulation.

The Mississippian limestone was encountered at 1340' and was a tan to light brown, hard, mostly non/XTLN limestone, with siltstone and shale stringers. There was no evidence for hydrocarbon accumulation in the Mississippian.

The Kinderhook shale was encountered at 1650'. There were no shows in the Kinderhook.

The Lime Creek came in at 1687'. It was primarily interbedded dolomitic limes and shaley silts, with no shows of hydrocarbons.

The Hunton was encountered at 1752' and consisted predominantly of light brown to brown dolomites and white to light brown limestones, both with interbedded calcareous shales. Generally porosity was poor with occasionally fair to good porosity in some of the dolomitic facies. No shows were recorded.

The Viola was penetrated at 2170'. It was a white very crystalline dolomite with no visible porosity. The lower Viola was brown to dark brown, less crystalline and "dirtier" or more argillaceous. A very slight cut was noted in the basal member or transitional zone between the dolomites of the Viola and the silty and sandy shales of the Simpson. However no abnormal readings were recorded on the gas detection equipment which indicates a total absence of volatile components.

The Simpson was encountered at 2395' with no shows recorded.

The St. Peter was entered at 2460' with no shows recorded.

The Arbuckle was penetrated at 2480' with no shows recorded.

VII. HOT WIRE ANOMALIES

No shows or abnormal readings were recorded by gas detection equipment.

VIII. FORMATION TOPS

	Log Top		Sample Top	
Formation	Depth	Datum	Depth	Datum
Cherokee	687	+ 297	648	+ 336
Mississippian	1340	- 356	1344	- 360
Kinderhook	1650	- 666	1648	- 664
Lime Creek	1687	- 703	1680	- 696
Hunton	1752	- 768	1748	- 764
Maquoketa	2120	-1136	2150	-1166
Viola	2170	-1186	2180	-1196
Simpson	2395	-1411	2400	-1416
St. Peter	2460	-1476	2465	-1481
Arbuckle	2480	-1496	2490	-1506

IX. SAMPLE DESCRIPTIONS

Interval	Description
240 - 260	SH - gry, grn, sft-frm, silty, calc, pyric
260 - 270	SLTST - gry, frm, v/small ls stringers, chlky, wht-gy, dense, n/xtln
270 - 280	SH - gry, lgrn, sft-frm, slty, calc, pyric
280 - 310	No Sample
310 - 370	LS - wht, tan, lbrn, frm-hd, dns, mostly n/xtln, occ fos, mstly crinoid stems, slty, pyric. Sh stringers throughout
370 - 380	SH - lgn, gry, dgy, frm-sft, slty, calc, pyric
380 - 390	LS - wht, chalky, v/sft-frm, n/fos
390 - 470	Alternating LS and SHALEaveraging 8-12' in thickness. LS is wht, tan, lbrn, frm-hd, dns, mstly n/xtln, slty ip, chlky ip, pyric. SH is grn, gry, sft-frm, slty, calc
470 - 510	LS - wht, ltan, hd, dns, mstly n/xtln, n/fos, n/por, slty, cherty
510 - 520	SH - blk, hd, dns, fis, vs/slty, s/calc, pyric
520 - 550	LS - wht, tan, sft, chlky, occ pyric.
550 - 560	SLTST - gry, s & p, frm, micac, calc
560 - 600	LS - wht, crm, hd, dns, featureless mudstone, n/fos, tr vfg ss. occ sh stringer
600 - 650	SH - lgn, gy, olive, occ red, frm-sft, slty ip, occ pyrite, mstly calc
650 - 670	SLTST - wht, s & p, frm-hd, calc
670 - 720	SS - wht, crm, f-vfg, mod srtd, sub ang, s/calc, occ gdng to sltst, sh stringers.
720 - 780	SLTST - wht, gy, s & p, micac, s/calc, occ gdng to vfg ss
780 - 810	Samples Unreliable
810 - 830	SLTST - a/a
830 - 840	SH - grn, lgy, frm, mottled ip, calc, slty, pyric, occ lse qtz grns
840 - 880	SS - wht, clr, f-cg, mod srtd, rnd-sub/ang, p/cons-uncons, coal stringers
880 - 940	SH - gy, grn, frm, fis ip, chunky ip, earthy, slty ip, calc
940 - 960	LS - wht, crm, hd, n/xtln, slty, n/fos, n/por
960 - 980	SH - gry, grn, tan, brn, frm, slty, earthy, pyric
980 - 990	SS - wht, gry, s & p, f-vfg, gdng to sltst
990 - 1000	No Sample
1000 - 1050	Alternating gry, grn, sh, and wht, gry sltst
1050 - 1080	SS - wht, clr, mstly uncons qtz grns, f-cg, traces coal
1080 - 1090	SH - gry, grn, frm, slty, sndy, calc
1090 - 1190	SS - wht, clr, s & p, mstly vfg, "dirty", abun sh, sltst zones, micac
1190 - 1240	SH - gry, lgrn, frm, slty, s/calc, tr coal, pyric
1240 - 1250	SS - wht, clr, f-vfg, fri, calc ip, no por
1250 - 1290	SH - gry, lgn, grn, frm, slty-v/slty, calc
1290 - 1330	SS - wht, gry, f-vfg, slty, "dirty"

1330 - 1390 - LS - wht, tan, brn, hd, dns, occ chlky, cherty, dolo ip, abun fos
1390 - 1460 - LS - a/a more chert, more dolomitic
1460 - 1500 - LS - wht, tan, brn, frm-hd, dns, v/cherty, dolo, foss, occ slty, no/por
1500 - 1550 - LS - a/a
1550 - 1590 - LS - a/a cherty
1590 - 1620 - DOLO - lbrn, brn, granular, hd, argil, no/por
1620 - 1640 - LS - wht, tan, brn, frm-hd, dns, cherty, dolo, occ slty, no/por, fos rare
1640 - 1670 - SH - gry, lgrn, frm, slty, calc
1670 - 1720 - LS - wht, tan, lbrn, frm-hd, mstly dns, p-no/por, occ tr xtln, insol anhyd
1720 - 1730 - SH - grn, gy, frm, fis ip, slty, much red shale was noted in sample before washing, but was very soluble in water and washed away
1730 - 1735 - SH - rep, sft, frm, v/soluble, v/hematite rich, abun 0.2 - 1.0 mm hematite nodules
1735 - 1770 - LS - wht, tan, brn, hd, dns, mstly n/xtln, silic, tr chert
1770 - 1840 - LS - a/a traces xtln ls, m/xtls, no/por
1840 - 1950 - DOLO - wht, brn, lbrn, well developed xtln dolo, rhombs easily vis, no/por, n/show, small stringers sh
1950 - 1980 - LS - wht, tan, hd, dns, dolomitic, poor/por
1980 - 1990 - LS - a/a gdng to sh
1990 - 2030 - SH - brn, gy, dgy, frm-sft, slty, micac, calc
2030 - 2050 - LS - wht, tan, brn, hd, dns, dolo
2050 - 2180 - DOLO - brn, lbrn, slty, "dirty", sandy streaks, p/por, n/show
2180 - 2300 - DOLO - wht, hd, rhombic xtals v/well developed, n/por, n/show
2300 - 2400 - DOLO - a/a abun streaks or stringers of shale
2400 - 2460 - Alternating beds of shale and dolomite
SH - gry, lbrn, frm, slty-v/slty, DOLO - tan, brn, granular, ip slty, toward bottom black residue present, occ vs/halo cut, no other indications for show
2460 - 2485 - SS - wht, clr, gg, mstly uncons qtz grns many with clear facets, others well to moderately rnded. some consolidation present with calcite cmt
2485 - 2520 - DOLO - wht, ltan, f/xtln, chlky or granular ip, vs/slty

AVERAGE DRILL RATE MIN/FT

	10	20	30	40	50	60	70	80	90	100
200	0	1.5	1.5	1.5	1.0	1.0	1.0	2.0	1.5	3.0
300	1.25	1.0	1.0	1.0	0.5	0.5	1.0	1.5	1.0	1.0
400	2.25	2.0	2.0	1.50	2.5	3.0	3.5	3.0	1.5	5.0
500	3.5	2.5	4.5	2.25	.75	.75	.75	.75	1.5	.75
600	.5	1.25	2.5	1.5	1.5	1.5	1.25	1.25	1.0	x
700	x	x	x	1.25	1.5	1.0	1.0	1.0	x	x
800	x	1.75	1.75	1.25	.75	.75	1.0	1.5	1.5	1.5
900	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	2.0	1.75
1000	2.0	2.0	1.75	2.0	2.0	1.75	.75	.3	.3	.75
1100	1.25	1.25	1.25	1.25	1.25	1.25	1.5	1.25	1.25	1.50
1200	1.75	2.25	1.75	1.75	2.5	2.5	1.75	2.0	1.5	1.5
1300	1.5	1.5	1.75	2.25	3.75	4.75	4.0	4.0	3.75	4.25
1400	2.0	2.75	2.5	2.0	2.5	3.0	3.5	3.75	3.75	3.75
1500	2.75	2.75	2.75	2.5	2.5	2.25	2.25	2.75	3.0	2.75
1600	2.5	2.5	3.0	3.25	4.0	2.25	1.5	1.5	3.0	4.75
1700	5.0	5.5	4.5	6.0	4.25	5.25	5.0	4.0	3.5	3.25
1800	2.5	3.75	4.5	4.5	4.0	3.5	3.5	2.5	2.25	3.0
1900	3.0	2.5	2.5	4.0	5.75	3.75	3.0	3.75	4.0	3.5
2000	2.75	5.0	6.25	6.0	3.5	6.0	3.5	3.0	4.0	4.0
2100	x	x	3.0	3.5	3.5	5.0	3.0	3.0	3.0	2.0
2200	2.75	3.5	2.25	2.0	2.25	2.75	2.5	2.5	3.0	4.0
2300	4.0	4.5	4.0	5.5	4.25	4.25	6.5	5.5	4.5	5.75
2400	7.25	5.0	4.75	3.0	3.5	4.0	4.5	4.5	5.0	9.0
2500	5.5	3.5								

x - denotes geolograph inop